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MINERALS PROGRAM
FILE COPY

September 12, 1989

TO: Minerals File

FROM: D. Wayne Hedberg, Reclamation Hydrologist *DWH*

RE: Field Inspection, Hecla Mining Company, Apex Mine, M/053/004,
Washington County, Utah

On September 12, 1989, Wayne Hedberg performed an onsite inspection of the Apex Mine. The purpose of the visit, was to inspect the proposed location of the new permit amendment. A new limestone quarry will be located directly adjacent to the existing Apex mine site. I met Mr. John Morgan, Office Manager, at the Hecla mill site.

Proceeding to the mine site, we met with Mr. Tom Graham, Apex Mine Superintendent, and Mr. Paul Price, acting superintendent for the ongoing small mine development.

One of the questions to be resolved, involved the company's request for variances on the permit admendment area. The permit amendment area is located on privately held patented lands. The amendment involves approximately 5 acres of additional surface disturbance. The area to be disturbed is relatively steep, with natural slopes approaching 30°. A relatively thin veneer of very rocky topsoil exists and the area is also characterized by numerous limestone outcrops. A topsoil variance is warranted because of the rocky and steep terrain which would make it very impracticable, if not impossible, to salvage the limited topsoil resource that exists in this area.

The revegetation variance request was discussed with the Hecla representatives with regard to the proposed final pit configuration. The permit application indicated that the ultimate highwall slopes would be at a 45° or less angle upon reclamation. However, the highwall configuration, with regard to benching or terracing, was not described. This option would provide a means of establishing some revegetation on the benches upon cessation of the mining operations in the quarry. Mr. Graham indicated that he would discuss this issue with Mr. Lou Knight and their mining engineer within the next couple of days. Mr. Graham indicated that following his discussions with management, he would contact me with the proposed final pit configuration designs. This information is necessary in order to determine a final reclamation cost estimate and also the ultimate question of a revegetation variance for the pit area. A highwall variance will not be necessary providing the operator leaves the final highwall slopes at the proposed 45° angle.

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A drainage concern was noted during the onsite inspection. The small mine developer has recently completed implementation of a drainage diversion at the mine site. This diversion involves installation of a 24-inch corrugated steel culvert which now bypasses undisturbed drainage from above the southwestern end of the mine yard area, underneath the pad and discharges into the natural drainage below the mine site. Three concrete drop boxes, with steel grates, have been installed on the mine pad area and on the access road below the mine pad area. All three drop boxes are tied into the 24-inch bypass culvert. The undisturbed drainage is mixed with the disturbed area drainage and discharges offsite. I informed the Hecla representatives that this is not an acceptable practice. I indicated that the disturbed area drainage would need to be isolated and separated from the undisturbed drainage diversion. The disturbed area drainage will need to be totally contained onsite within the disturbed area, or it will need to be treated prior to discharge into the undisturbed drainage area. I indicated that I would try to contact Mr. Lou Knight early next week to discuss this concern.

Upon conclusion of my site inspection, I indicated to Mr. Morgan that I would be preparing a field memo, or a letter based upon my site inspection which would be forwarded to them upon completion. I indicated to Mr. Morgan that I should have enough information to proceed with finalization of the permit amendment. However, I did ask him to provide the Division with information concerning the final pit configuration for the limestone quarry in order to resolve the revegetation variance question. I requested that Hecla provide the Division with an updated surface facilities map of the Apex Mine which identifies all the existing and new surface facilities that exist at the mine. I also asked Mr. Morgan to speak with management regarding the development schedule that is proposed for the limestone quarry. I indicated to Mr. Morgan that I hope we could resolve our remaining concerns regarding the permit amendment and finalization of the reclamation surety issue within the next couple of weeks.

jb
cc: John Morgan
Lowell Braxton
MN2/52-53